

system comprising:

transducer means, spaced from the medium to be inspected, for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency said transducer means including a laser vibrometer interferometer for sensing the acoustic signal propagating in the medium.

Please add claims 26-29 as follows:

26. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system, comprising:

a transducer, spaced from the medium to be inspected, that transmits optical energy for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency; and

a detector, responsive to the sensed propagating acoustic signal, that detects in the sensed acoustic signal the Doppler shifted frequency representative of a flaw in the medium.

27. The flaw detection system using acoustic Doppler effect of claim 26 in which said transducer includes a laser that transmits said optical energy.

28. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system, comprising:

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a transducer, spaced from the medium to be inspected, that introduces to and senses from the medium an acoustic signal that propagates in said medium at a predetermined frequency, said transducer including a laser vibrometer interferometer that senses the acoustic signal propagating in the medium.

29. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system, comprising:

a transducer, spaced from the medium to be inspected, that induces an acoustic signal to propagate in the medium at a predetermined frequency and senses the propagating acoustic signal in the medium, said transducer including a transmitter and a receiver, said transmitter including a laser that locally heats the medium to generate acoustic signals; and

means, responsive to the sensed propagating acoustic signal, for distinguishing the Doppler shifted frequency representative of a flaw in the medium.

A marked up copy of the claims as amended is attached at the end of this amendment for the Examiner's convenience.

REMARKS

The Applicant appreciates the Examiner's thorough examination of the application and requests reexamination and reconsideration of the application in view of the preceding amendments and the following remarks.